

FILE 'HOME' ENTERED AT 11:55:39 ON 20 OCT 2008

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 11:56:06 ON 20 OCT 2008

69 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0\* with SET DETAIL OFF.

=> s (anopore or ((aluminum or metal##) (4a) oxide)) (s) por###

12	FILE AGRICOLA
17	FILE ANABSTR
60	FILE ANTE
24	FILE AQUALINE
32	FILE AQUASCI
29	FILE BIOENG
74	FILE BIOSIS
93	FILE BIOTECHABS
93	FILE BIOTECHDS
23	FILE BIOTECHNO
38	FILE CABA
7886	FILE CAPLUS
144	FILE CEABA-VTB
13	FILE CIN
15	FILE CONFSCI
4	FILE CROPU
1	FILE DDFB
35	FILE DGENE

23 FILES SEARCHED...

184	FILE DISSABS
1	FILE DRUGB
2	FILE DRUGU
3	FILE EMBAL
101	FILE EMBASE
114	FILE ESBIODBASE
4	FILE FROSTI
11	FILE FSTA
301	FILE GENBANK
1	FILE HEALSAFE
4676	FILE IFIPAT
8	FILE KOSMET
43	FILE LIFESCI
109	FILE MEDLINE
207	FILE NTIS
11	FILE OCEAN
987	FILE PASCAL

47 FILES SEARCHED...

1	FILE PHIN
244	FILE PROMT
19	FILE RDISCLOSURE
1016	FILE SCISEARCH
542	FILE TOXCENTER

20 FILE USGENE  
20625 FILE USPATFULL  
3312 FILE USPATOLD  
3475 FILE USPAT2  
54 FILE WATER  
6843 FILE WPIDS  
67 FILES SEARCHED...  
92 FILE WPIFV  
6843 FILE WPINDEX

48 FILES HAVE ONE OR MORE ANSWERS, 69 FILES SEARCHED IN STNINDEX

L1 QUE (ANOPORE OR ((ALUMINUM OR METAL##) (4A) OXIDE)) (S) POR###

=> s L1 (s) (cultur### or grow###)

2 FILE AGRICOLA  
2 FILE ANABSTR  
11 FILE ANTE  
2 FILE AQUASCI  
5 FILE BIOENG  
4 FILE BIOSIS  
21 FILE BIOTECHABS  
21 FILE BIOTECHDS

12 FILES SEARCHED...

2 FILE BIOTECHNO  
4 FILE CABA  
183 FILE CAPLUS  
10 FILE CEABA-VTB  
1 FILE CONFSCI  
3 FILE DGENE

23 FILES SEARCHED...

31 FILE DISSABS  
5 FILE EMBASE  
14 FILE ESBIODBASE  
1 FILE FROSTI  
2 FILE FSTA  
71 FILE GENBANK  
81 FILE IFIPAT  
2 FILE KOSMET  
12 FILE LIFESCI

42 FILES SEARCHED...

8 FILE MEDLINE  
8 FILE NTIS  
156 FILE PASCAL

52 FILES SEARCHED...

9 FILE PROMT  
1 FILE RDISCLOSURE  
68 FILE SCISEARCH  
4 FILE TOXCENTER  
733 FILE USPATFULL  
53 FILE USPATOLD  
153 FILE USPAT2  
1 FILE WATER  
103 FILE WPIDS

67 FILES SEARCHED...

2 FILE WPIFV  
103 FILE WPINDEX

37 FILES HAVE ONE OR MORE ANSWERS, 69 FILES SEARCHED IN STNINDEX

L2 QUE L1 (S) (CULTUR### OR GROW###)

=> s L2 (s) (microb### or microorganism# or bacteri## or cell# or virus##)

2 FILE AGRICOLA  
2 FILE ANABSTR  
2 FILE ANTE  
1 FILE AQUASCI  
4 FILE BIOENG  
3 FILE BIOSIS

10 FILES SEARCHED...

17 FILE BIOTECHABS  
17 FILE BIOTECHDS  
1 FILE BIOTECHNO

13 FILES SEARCHED...

2 FILE CABA  
8 FILE CAPLUS  
1 FILE CEABA-VTB  
2 FILE DGENE

23 FILES SEARCHED...

3 FILE EMBASE  
8 FILE ESBIODBASE

30 FILES SEARCHED...

2 FILE FSTA  
71 FILE GENBANK  
12 FILE IFIPAT  
2 FILE KOSMET  
9 FILE LIFESCI  
3 FILE MEDLINE

43 FILES SEARCHED...

18 FILE PASCAL

47 FILES SEARCHED...

2 FILE PROMT  
4 FILE SCISEARCH

60 FILES SEARCHED...

127 FILE USPATFULL  
8 FILE USPATOLD  
23 FILE USPAT2  
1 FILE WATER  
26 FILE WPIDS  
1 FILE WPIFV

68 FILES SEARCHED...

26 FILE WPINDEX

31 FILES HAVE ONE OR MORE ANSWERS, 69 FILES SEARCHED IN STNINDEX

L3 QUE L2 (S) (MICROB### OR MICROORGANISM# OR BACTERI## OR CELL# OR VIRUS##)

=> s L3 and (detect### or determin### or ascertain###)

1 FILE ANABSTR  
2 FILE BIOSIS  
10 FILES SEARCHED...  
2 FILE BIOTECHABS  
2 FILE BIOTECHDS

13 FILES SEARCHED...

1 FILE CABA  
2 FILE CAPLUS

23 FILES SEARCHED...

1 FILE EMBASE  
1 FILE ESBIODBASE

30 FILES SEARCHED...

60 FILE GENBANK  
3 FILE IFIPAT

```

1 FILE KOSMET
1 FILE LIFESCI
42 FILES SEARCHED...
1 FILE MEDLINE
7 FILE PASCAL
47 FILES SEARCHED...
1 FILE SCISEARCH
60 FILES SEARCHED...
113 FILE USPATFULL
5 FILE USPATOLD
23 FILE USPAT2
9 FILE WPIDS
67 FILES SEARCHED...
9 FILE WPINDEX

```

20 FILES HAVE ONE OR MORE ANSWERS, 69 FILES SEARCHED IN STNINDEX

L4 QUE L3 AND (DETECT### OR DETERMIN### OR ASCERTAIN###)

=> d rank

```

F1      113    USPATFULL
F2       60    GENBANK
F3       23    USPAT2
F4        9    WPIDS
F5        9    WPINDEX
F6        7    PASCAL
F7        5    USPATOLD
F8        3    IFIPAT
F9        2    BIOSIS
F10       2    BIOTECHABS
F11       2    BIOTECHDS
F12       2    CAPLUS
F13       1    ANABSTR
F14       1    CABA
F15       1    EMBASE
F16       1    ESBIODBASE
F17       1    KOSMET
F18       1    LIFESCI
F19       1    MEDLINE
F20       1    SCISEARCH

```

=> fil f4, f5, f8-f20

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	15.60	15.81

FILE 'WPIDS' ENTERED AT 12:10:18 ON 20 OCT 2008  
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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

FILE 'IFIPAT' ENTERED AT 12:10:18 ON 20 OCT 2008  
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FILE 'MEDLINE' ENTERED AT 12:10:18 ON 20 OCT 2008

FILE 'SCISEARCH' ENTERED AT 12:10:18 ON 20 OCT 2008  
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```
=> s L4
    4 FILES SEARCHED...
    9 FILES SEARCHED...
L5          26 L4
```

```
=> dup rem L5
DUPLICATE IS NOT AVAILABLE IN 'KOSMET'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L5
L6          18 DUP REM L5 (8 DUPLICATES REMOVED)
```

```
=> s L6 and py<2004
    6 FILES SEARCHED...
    9 FILES SEARCHED...
   12 FILES SEARCHED...
L7          2 L6 AND PY<2004
```

```
=> d L7 ibib abs 1-2
```

```
L7  ANSWER 1 OF 2  IFIPAT  COPYRIGHT 2008 IFI on STN
AN          02710823  IFIPAT;IFIUDB;IFICDB <<LOGINID::20081020>>
TITLE:      PROCESS FOR TREATING AQUEOUS SOLUTIONS CONTAINING
              INDUSTRIAL WASTES; FLOWING AQUEOUS SOLUTION
              CONTAINING METAL IONS OVER POROUS MATRIX
              WHICH HAS BEEN INOCULATED WITH CULTURE OF
              AEROBIC METAL OXIDIZING BACTERIA YIELDS
              WATER INSOLUBLE METAL OXIDES FOR
              RETENTION AND RECOVERY
INVENTOR(S): Riley, Robert K, Broad St, Midland, MD, 21542, US
              Vail, William J, 15711 Winslow St SW, Cumberland, MD,
```

PATENT ASSIGNEE(S): 21542, US  
 PRIMARY EXAMINER: Unassigned  
 AGENT: Upton, Christopher  
 Ware, Fressola, Van Der Sluys & Adolphson

	NUMBER	PK	DATE
PATENT INFORMATION:	US 5510032	A	19960423
	(CITED IN 006 LATER PATENTS)		
APPLICATION INFORMATION:	US 1994-319983		19941007
EXPIRATION DATE:	23 Apr 2013		

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
CONTINUATION OF:	US 1992-912814	19920713	ABANDONED
CONTINUATION-IN-PART OF:	US 1993-169741	19931217	5441641
FAMILY INFORMATION:	US 5510032	19960423	
	US 5441641		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	CHEMICAL		
	GRANTED		
OTHER SOURCE:	CA 124:351693		
ENTRY DATE:	Entered STN: 29 Apr 1996		
	Last Updated on STN: 21 Jul 1997		

NUMBER OF CLAIMS: 35  
 GRAPHICS INFORMATION: 7 Drawing Sheet(s), 7 Figure(s).

AB A treatment zone 10 in the form of a basin 12 having an inlet port 14 and an outlet port 16. The inlet port 14 allows water to flow into the basin 12. The outlet port 16 allows water to flow out of the basin 12. The inlet port 14 and the outlet port 16 are located at opposite ends of the basin 12 so as to allow water from a body of water having a concentration of water soluble metal ions contained therein to flow substantially through the entirety of the basin 12. A porous matrix 22 is disposed within the treatment zone 10. The porous matrix 22 is inoculated with a population of aerobic metal oxidizing bacteria. The population of aerobic metal oxidizing bacteria is capable of metabolizing water soluble metal ions in the water from the body of water into water insoluble metal oxides. Thus, there is an overall decrease in the concentration of the metal ions in the water flowing out of the treatment zone 10 as compared to water flowing into the treatment zone 10. The water flow out of the treatment zone also has a higher pH than the water flowing into the treatment zone.

CLMN 35  
 GI 7 Drawing Sheet(s), 7 Figure(s).

L7 ANSWER 2 OF 2 ANABSTR COPYRIGHT 2008 RSC on STN  
 AB An amperometric biosensor has been developed in which *Synechococcus* cyanobacterium is used as biocatalyst with K<sub>3</sub>Fe(CN)<sub>6</sub> in BG11 culture medium (Rippka et al., J. Gen. Microbiol., 1979, 111, 1) as mediator. The freshly harvested cells were loaded on to discs of 0.2-µm Anopore alumina membrane (Anotec Separations, Banbury, UK) or entrapped in Ca alginate, and the membrane was immediately applied, cell side inward, to a porous graphite disc electrode (Rawson et al., Toxic. Assess., 1987, 2, 325) and held in place by nylon mesh. The resulting sensor was conditioned overnight in BG11 in the dark at 25°. The biosensor was used in a Perspex flow cell vs. a Ag - AgCl electrode, under illumination by light-emitting diodes (peak wavelength 635 nm) for 5 min followed by 5 min in the dark, to monitor the activity of photosynthetic electron

transfer within the microbial cell by  
detection of reduced mediator; disturbance of the reaction chain  
by addition of herbicide (e.g., ioxynil or linuron) caused a reduction of  
peak current. The detection limit was  $2.0 \mu\text{g l}^{-1}$ .  
Cells immobilized on alumina membrane showed the greatest  
sensitivity and those in rehydrated alginate beads the lowest, but the  
latter method gave sensors with the best shelf-life; beads incorporating  
the cells could be stored dry and rehydrated in 5mM-trisodium  
citrate before use.

=> logoff